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# **U. S. Department of Energy**

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## **Federal Technical Capability Program Fiscal Year (FY) 2004 Annual Plan**



**November 20, 2003**

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## INTRODUCTION

The objective of the Federal Technical Capability Program (Program) is to recruit, deploy, develop, and retain Federal personnel with the necessary technical capabilities to safely accomplish the Department's missions and responsibilities. The current Program was formalized in 1998 through Department directives DOE P 426.1, *Federal Technical Capability Program for Defense Nuclear Facilities*, and DOE M 426.1-1, *Federal Technical Capability Manual*.

The Federal Technical Capability Panel (FTCP) provides leadership in implementing the Program. The FTCP consists of senior technical safety managers representing nuclear facilities, and advises the Deputy Secretary on matters related to Federal workforce technical capability. The responsibilities of the FTCP are defined in DOE M 426.1-1, *Federal Technical Capability Manual*, as follows:

- Overseeing and resolving issues affecting the Program.
- Developing and maintaining a Federal Technical Capability Policy for the Department.
- Overseeing implementation of the Department's Senior Technical Safety Manager (STSM) program and Technical Leadership Development Program (TLDP).
- Performing or overseeing periodic assessments of the effectiveness of the Program using internal and external experts.
- Conducting periodic meetings with the Defense Nuclear Facilities Safety Board and its staff to communicate issues and expectations regarding execution of the Program.
- Providing recommendations to senior Departmental officials regarding the improvement of DOE technical capability, including issuance of an annual report.

## CANCELLATION

This Plan supercedes and cancels the FTCP Annual Plan for Fiscal Year (FY) 2003. The FTCP evaluated all ongoing activities under the previous plan and determined which ones had met their objectives and which ones needed to be continued in the current plan.

## CHANGE CONTROL

The FTCP FY 2004 Annual Plan is a dynamic, living document for use in improving the technical capabilities of the DOE federal workforce. The FTCP will develop, approve, and implement changes to the scope, contents, schedule, and responsibilities of this plan as needed to fulfill the FTCP's mission.



Roy Schepens  
Chairman,  
Federal Technical Capability Panel

## **FY 2004 ACTION PLAN**

### **OVERVIEW**

The FY-2004 plan focuses on six specific actions:

- Review workforce analysis and staffing
- Implement safety system oversight
- Implement software quality assurance
- Enhance authorization basis capability
- Measure performance in improving federal capability
- Review the role of program assessments

### **1.0 REVIEW WORKFORCE ANALYSIS AND STAFFING**

Department organizations are required to conduct an annual workforce analysis and develop a staffing plan that identifies critical technical capabilities and positions to ensure safe operations at defense nuclear facilities [DOE M 426.1-1, Chapter IV]. These staffing plans must identify: (1) critical staffing needs and actions to address them, (2) staffing needs for technical positions, and (3) methods to be used to fill staffing needs.

**Action 1.1**                      Provide workforce staffing plans to be used in Action 1.2.

**Lead Responsibility:**      FTCP Agents

**Action for Closure:**      EM workforce staffing plans provided to Joseph Arango (EM-3) and NA staffing plans provided to Emil Morrow (NA-3)

**Completion Goal:**        January 2, 2004

**Action 1.2**                      Systematically review staffing plans for Departmental organizations to determine whether they meet the requirements of DOE M 426.1-1 and whether they are qualitatively comparable in terms of staffing needs based on types and level of hazards, number and type of facilities, activity level, and degree of ongoing change. The FTCP will select a team of experienced senior technical safety managers to review the staffing plans. The review will focus primarily on personnel performing four functions: (1) senior technical safety managers, (2) facility representatives, (3) safety system oversight personnel, and (4) authorization basis personnel. The team is expected to meet for no more than 40 working hours to review and compare the staffing plans.

**Lead Responsibility:**      Joseph Arango (EM-3) lead, with Emil Morrow (NA-3) as deputy lead.

**Action for Closure:**      A report from the team which addresses the following: (1) whether the existing staffing plans meet the requirements of DOE M 426.1-1, (2) any

corrective actions required for existing staffing plans, (3) a qualitative comparison of staffing plans identifying commonalities, inconsistencies, and outliers on staffing levels based on types and level of hazards, number and type of facilities, activity level, and degree of ongoing change.

Completion Goal: March 2004

## **2.0 IMPLEMENT SAFETY SYSTEM OVERSIGHT**

The Secretary committed to implement a federal safety system oversight program as part of the Department's 2000-2 implementation plan, approved in October 2000. The FTCP has the lead for developing the federal technical capability to perform this safety system oversight.

**Action 2.1** Issue a revision to DOE Manual 426.1-1, *Federal Technical Capability Manual*, which incorporates technical qualification standards for safety system oversight personnel.

Lead Responsibility: Roy Schepens (FTCP Chair)

Action for Closure: Approved revision to DOE M 426.1-1.

Completion Goal: December 2003

**Action 2.2** Communicate with program and field office managers regarding the expectations for implementing the safety system oversight program.

Lead Responsibility: Roy Schepens (FTCP Chair)

Action for Closure: Briefings to the major program office and field office managers. This would best be accomplished at a periodic face-to-face meeting or a conference call held for EM site/program managers and for NNSA site/program managers. The FTCP briefing is envisioned to be no more than 15 minutes including questions and answers.

Completion Goal: January 2004

**Action 2.3** Conduct kick-off meeting with SSO leads from each program and site, and share key expectations and milestones for implementation.

Lead Responsibility: John Swailes (ORP)

**Action for Closure:** Kick-off meeting outlining key expectations and milestones. The following information will be shared at this kick-off meeting: (1) generic qualification program and generic qualification card for safety system oversight personnel, and (2) Criteria and Review Approach Documents (CRADs) for assessing implementation.

**Completion Goal:** February 2004

**Action 2.4** Conduct workshop on implementation lessons learned for all site and program SSO leads and for SSO personnel.

**Lead Responsibility:** John Swailes (ORP)

**Action for Closure:** Hold SSO workshop in concert with annual Facility Representatives workshop.

**Completion Goal:** June 2004

**Action 2.5** Begin initial assessments of SSO program implementation. Initial assessments will focus on the SSO qualification process, including qualification cards, and on SSO program staffing.

**Lead Responsibility:** John Swailes (ORP)

**Action for Closure:** Reports on initial SSO program implementation assessments for at least 1 NNSA site and 1 EM site. Define schedule for completing initial SSO program implementation assessments.

**Completion Goal:** September 2004

**Action 2.6** Complete initial SSO program implementation assessments.

**Lead Responsibility:** John Swailes (ORP)

**Action for Closure:** Reports on initial SSO program implementation assessments for all applicable sites.

**Completion Goal:** December 2004 [FY-2005]

**Action 2.7** Conduct SSO program implementation final assessments. Final assessments will focus on implementation, on actual in-place staffing, qualification, and performance.

**Lead Responsibility:** John Swailes (ORP)

**Action for Closure:** Perform final SSO program assessments to determine whether sites have trained, qualified, and capable SSO personnel performing their roles.

**Completion Goal:** September 2005 [FY-2005]

### **3.0 IMPLEMENT SOFTWARE QUALITY ASSURANCE**

The Secretary committed to implement a software quality assurance program as part of the Department's 2002-1 implementation plan, approved in March 2003. EH has the lead in the Department's implementation plan. The FTCP is supporting the EH responsible manager for developing the federal technical capability to conduct and oversee software quality assurance. The FTCP activities will be fully coordinated with the EH-led implementation team.

**Action 3.1** Establish technical qualification requirements for Federal personnel whose duties and responsibilities require them to provide assistance, guidance, direction, oversight, or evaluation of safety software QA activities.

**Lead Responsibility:** Richard Stark (EH)

**Action for Closure:** Software Engineer Technical Qualification Standard (or revision of an existing Qualification Standard)

**Completion Goal:** November 2003

**Action 3.2** Provide guidance to the field regarding: (1) generic qualification program and generic qualification card for software quality assurance personnel, and (2) Criteria and Review Approach Documents (CRADs) for assessing implementation.

**Lead Responsibility:** Richard Stark (EH)

**Action for Closure:** Guidance letter to the field regarding implementation expectations.

**Completion Goal:** March 2004

**Action 3.3** Perform initial SQA program implementation assessments.

**Lead Responsibility:** Richard Stark (EH)

Action for Closure: Reports on initial SQA program implementation assessments for all applicable sites.

Completion Goal: September 2004

**Action 3.4** Conduct final SQA program implementation assessments.

Lead Responsibility: Richard Stark (EH)

Action for Closure: Perform final SSO program assessments to determine whether sites have trained, qualified, and capable SQA personnel performing their roles.

Completion Goal: September 2005 [FY-2005]

#### **4.0 ENHANCE AUTHORIZATION BASIS CAPABILITY**

Department efforts to upgrade the federal technical workforce are centered on personnel performing four functions: (1) senior technical safety managers, (2) facility representatives, (3) safety system oversight personnel, and (4) authorization basis personnel. The FTCP has devoted considerable attention to the first three groups of personnel. FTCP attention to enhancing the capability of the federal personnel performing authorization basis work is merited based on the importance and technical difficulty of this work, and its foundation to all safety management activities.

**Action 4.1** The FTCP will facilitate formation of a working group of FTCP personnel and authorization basis experts representing a cross-section of the DOE site offices. The authorization basis working group will review current practices and experience in performing DOE authorization basis reviews to identify good practices and opportunities for improvement. The authorization basis working group will identify specific actions to be pursued to upgrade and enhance the capability and qualifications of the DOE authorization basis personnel, to improve the training and development process, and to enhance the pipeline of federal authorization basis personnel. For each action, an action plan will be prepared to define specific objectives, responsibilities, schedules, and resources required.

Lead Responsibility: Emil Morrow (NA 3.6) and Shirley Olinger (RL)

Action for Closure: A plan of action, approved by the applicable program secretarial officers.

Completion Goal: March 2004 – to form authorization basis working group  
September 2004 – to prepare action plan

## **5.0 MEASURE PERFORMANCE IN IMPROVING FEDERAL CAPABILITY**

The FTCP established a quarterly performance measures report to focus line manager's attention on achieving the key Department goals related to upgrading the DOE federal technical workforce. The collection and dissemination of quarterly performance data has proven to be useful in focusing management attention and will be continued in FY 2004.

**Action 5.1**                      Produce quarterly FTCP performance reports. Continue to modify report format to be meaningful. Incorporate performance measures for SSO and SQA implementation.

**Lead Responsibility:**      Ted Wyka (DR-1)

**Action for Closure:**      Quarterly FTCP reports, issued within 45 days of the end of each quarter.

**Completion Goal:**        Quarterly

## **6.0 REVIEW THE ROLE OF PROGRAM ASSESSMENTS**

Chapter IX of DOE M 426.1-1, *Federal Technical Capability Manual*, provides guidance and criteria for conducting periodic assessments of federal technical capability and technical qualification programs. Various assessments are envisioned in this chapter, including field office assessments, program office assessments, and DOE-wide assessments. Both internal and independent assessments are envisioned. Objectives and criteria for performing these assessments are defined in Chapter IX.

**Action 6.1**                      Review the FTCP Independent Assessment of June 2000 for completion of findings/recommendations.

**Lead Responsibility:**      Bob Poe (OR)

**Action for Closure:**      Provide into assessment team identified in Action 6.1

**Completion Goal:**        February 2004

**Action 6.2**                      Review the existing requirements, guidance, and criteria for program assessments in DOE M 426.1-1, Chapter IX, and make recommendations for changes to the manual. The FTCP will select a team of experienced senior technical safety managers to review the assessment expectations. Consider reducing the content and periodicity of site assessments for programs that have met the 75% qualification standard.



**Lead Responsibility:** Dan Hoag (Y-12)

**Action for Closure:** A report from the team established by the FTCP which addresses the following: (1) current state of compliance with the Chapter IX provisions, and (2) recommended changes to the Chapter IX provisions.

**Completion Goal:** June 2004

**Action 6.3** Review and discuss the lessons learned from the NNSA Columbia Accident review for applicability to FTCP related initiatives and responsibilities.

**Lead Responsibility:** Shirley Olinger (RL) and Emil Morrow (NA-3.6)

**Action for Closure:** Briefing to the FTCP

**Completion Goal:** May 2004